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BASF Aktiengesellschaft

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We claim: -

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A process for controlled partial decolorization of vat- or sulfur-dyed or -printed textile material, especially denim fabric, which comprises treating the textile material to be lightened or decolorized with one or more compounds (aminoalkanesulfinates) of the formula/I

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 $R^{1}_{3-z}N(CR^{2}R^{3}-SO_{2}M)_{z}$ (

Where

z is 1, 2 or 3,

 R^1 is

a) when z is 1 or 2: hydrogen, alkyl of 1 to 18 carbon atoms or $HQCH_2CH_2$,

b) when z is 2: additionally OH, and

c) when z is 1: either as defined under a) independently for the two R^1 radicals

or as defined under a) in one instance and as defined under b) in the other,

 R^2 and R^3 , which may be the same or different, are each hydrogen or alkyl of 1 to 4 carbon atoms subject to the proviso that together they have not more than 4 carbon atoms, and

M is one equivalent of a mono- or divalent metal atom,

at pH/4 - 7, followed if desired by ar aftert eatment with hydrogen peroxide.

2. A process as claimed in claim 1, wherein in one or more compounds of the formula I used z is 3 and \mathbb{R}^1 , \mathbb{R}^2 and \mathbb{R}^3 are each hydrogen.

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In claim 1, utilizing claimed 3. A process as mixtures of compounds of the formula I where the z different meanings, especially indices have 5 in which the various compounds mixtures present in that ratio which corresponds to their equilibrium concentration in an aqueous system of compounds of the formula I, the amine or the hydroxylamine of the formula $R^{1}_{3-z}NH_{z}$ and a hydroxyalkanesulfinate of the formula HO-CR2R3-SO2M, where R1, R2, R3, z and M are each as defined above and the molar ratio of sulfur-containing compounds to nitrogen-containing compounds is in the range from 0.2 to 1.1.

A process as claimed in claim 1, utilizing mix-4. tures of compounds of the formula I with the corresponding aminoalkanesulfonates where the ratio of aminoalkanesulfinic acid to aminoalkanesulfonic 20 acid is from about 3:1 to about 1:3.

A process as claimed in claim 1, wherein the tex-5. tile material is additionally, preferably concurrently, treated with one or more further assistapt's from the group/of the backstain inhibitors and/or dispersants and/or surfactants, preferably in total in an amount of from 0.5 to 10.0 g/l.

- A process as claimed in claim 5, wherein the ratio 6. of an aminoalkanesulfonate to further assistants 30 is in the range from 20:1 to 5:1.
- A process as claimed in claim 5, wherein the back-7. stain inhibitor is polyvinylpyrrolidone, acid alkoxylate or fatty acid alkoxylate. 35

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- 8. A process as claimed in claim 1, wherein the compounds of the formula I are printed in the form of a print paste onto the dyeing to be bleached.
- 5 9. A preparation for carrying out the process of claim 1, comprising a solution of the sulfinates of the formula I and/or an equilibrium mixture as set forth in claim 3 and/or a mixture with the corresponding aminoalkanesulfonic acids as set forth in claim 4, and also process-specific assistants, especially backstain inhibitors, dispersants and/or surfactants.
- 10. A method of using aminoalkanesulfinates of the formula I or of mixtures thereof, where the z indices have different meanings, for, preferably partial, decolorization (lightening) of vat- or sulfur-dyed textile materials.
- 20 11. A method of using aminoalkanesulfinates of the formula I or of mixtures thereof, where the z indices have different meanings, for preparing discharge prints especially in the half-tone area.

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